



# CITY OF RIVERSIDE

Building & Safety Division

Phone: (909) 826-5697



## ❖ DRAWING REQUIREMENTS ❖

### NEW HOMES & ROOM ADDITIONS

#### **HOW MANY COPIES OF THE PLANS DO I SUBMIT FOR REVIEW ?**

For room additions 650 square feet or less in total area, two (2) complete sets of plans and two (2) additional floor plans and plot plans (for the Planning Department & County Assessor) must be submitted. For additions over 650 square feet and new homes, three (4) full sets, four (4) separate site plans and one (1) separate floor plans will be required. The plans presented must be non-erasable and on substantial paper exactly as the building is to be constructed. Defaced, incomplete, indefinite, or faded plans cannot be approved. Plans must be signed by the person who prepared them.

#### **WHAT INFORMATION MUST BE SHOWN ON THE PLANS ?**

*(See attached sample drawings for additional information.)*

1. **PLOT PLAN:** The Plot Plan must be drawn to scale with setbacks identified between the property lines and any structures (existing and new). Show location of all existing structures (if any). Provide a north arrow. On new homes, the site plan should include locations of utility meters, driveway locations, right-of-ways or easements. An information box should be placed in the bottom right corner indicating the street address, site area, owners name, and the name of the person preparing the plans.
2. **FOUNDATION PLAN:** Provide a plan view (also called a bird's eye view) of the foundation slab and cross sectional footing detail, show all holdown hardware and indicate anchor bolt size and spacing.
3. **FLOOR PLAN:** Provide a double lined plan view of proposed job. Indicate size and location of all doors, windows, and headers. Show size, spacing, and direction of ceiling joists. Identify all plumbing fixtures, electrical devices, outlets, lights, and switches. For room additions, show the existing use, square footage and the location and size of windows in the adjacent rooms. Indicate the proposed square footage of the addition and its use.
4. **ROOF PLAN:** Truss calculations are required for proposed trussed roof, or if conventionally framed, indicate size, spacing and direction of rafters. Identify roof finish material and sheathing underlayment.
5. **EXTERIOR ELEVATIONS:** For room additions, provide (3) exterior elevations identified as front, left and right sides. Show doors, windows, finished floor line, exterior finish, and indicate roof pitch. On new homes, all (4) exterior elevations should be shown. Additionally, if the project was subject to Design Review, indicate all applicable colors and other requirements of the Planning Department.

6. **REQUIRED DETAIL:** Provide a cross section (cut view) of proposed job. Show foundation, wall studs, ceiling joists, rafters, roof pitch, etc. Indicate size, spacing, and materials proposed. If ceiling is vaulted, show cross section and structural connections.
7. **FINISH MATERIALS:** Indicate ceiling, wall, and floor finish materials on floor plan, also identify proposed glazing (dual or single glazing).
8. **ENGINEERING (STRUCTURAL) CALCULATIONS:** Submit two (2) complete sets of structural calculations and truss calculations (if applicable) with the architect's or engineer's original wet signature and stamp on both sets of calculations and plans. The plans and calculations must correlate with each other.

**NOTE:** If the proposed construction conforms to conventional construction parameters, structural calculations are not required. See the "Residential Conventional Construction" handout for additional information.

9. **T-24 ENERGY CONSERVATION INFORMATION:** Generally, for room additions the Title 24 Energy Conservation Regulations apply only to the new habitable areas, nothing needs to be done to the existing portions of the home.

The following are minimum requirements for room additions and must be specified on your plans:

- A. R-30 ceiling insulation
- B. R-13 wall insulation
- C. R-19 insulation in raised floor areas (if any)
- D. Dual glazing (not to exceed 20% of the gross floor area plus the area of any removed glazing for additions). All new windows must be factory labeled as 0.35 SHGC (Max.) and 0.40 U-Factor (Max.).
- E. The room addition or new home must also comply with the Mandatory Features and Devices regulations. Any deviations in this area will be identified during the plan review process.

For new dwellings and room additions which cannot meet the prescriptive requirements of the Package Compliance Method, the Point System Compliance Method must be used. The Point System Compliance Method requires that an individual knowledgeable about the requirements of Title 24 Energy Conservation regulations perform a series of calculations to determine the appropriate levels of insulation, size of mechanical equipment and size of water heater.

10. **ADDITIONAL REQUIREMENTS:** Additional information may be required by other City Departments or by the Building and Safety Division in order to convey needed information relative to the construction of your project. Please feel free to contact any member of the Building and Safety Division for additional assistance with your project here in the City of Riverside.



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## ❖ RESIDENTIAL CONVENTIONAL CONSTRUCTION ❖

The **Uniform Building Code**, Section 2320 discusses some of the basic concepts and provisions relevant to conventional light-frame wood construction. By following the guidelines listed below, plans for a typical wood framed home may be prepared **without** the review of a professional Architect or Engineer. **Nevertheless**, we encourage you to seek the advice and review of a professional Architect or Engineer whenever possible, even if the code does not require it.

1. A maximum of two stories is allowed (not split level).
2. Rectangular or L-shaped in plan (not unduly irregular).
3. Continuous external and internal bearing stud wall type footings (no spread footings or stepped footings).
4. Continuous and uninterrupted floor diaphragms (except for stairwell openings).
5. Gable or hipped roof (no gambrel, shed, split shed, or flat roofs).
6. Roof pitch between 3 in 12 and 6 in 12 inclusive.
7. Spaced roof sheathing permissible within code limitations.
8. Distance between exterior bearing walls:
  - a. Thirty-five feet with an interior bearing wall.
  - b. Twenty-five feet without an interior bearing wall.
9. No floor area or walking deck over the garage.
10. Exterior and interior walls to be braced in accordance with Sections 2320.5 and 2320.11 of the Uniform Building Code.
11. Limit header spans to no more than 12' when supporting roof loads only, and no more than 10' when supporting floor loads.
12. Headers required to be larger than 4"X 12" due to excessive spans or loads may require analysis by an Architect or Engineer.

Any special feature not included above which would adversely affect the structural stability of the building, or which may require a structural analysis will classify the building as a non-conventional structure requiring an engineer's or architect's review and signature in accordance with the Business and Professions Code of the State of California.

# SAMPLE DRAWING

LEGAL DESCRIPTION

TRACT #

LOT #

ASSESSORS PARCEL NUMBER

OWNER'S NAME:

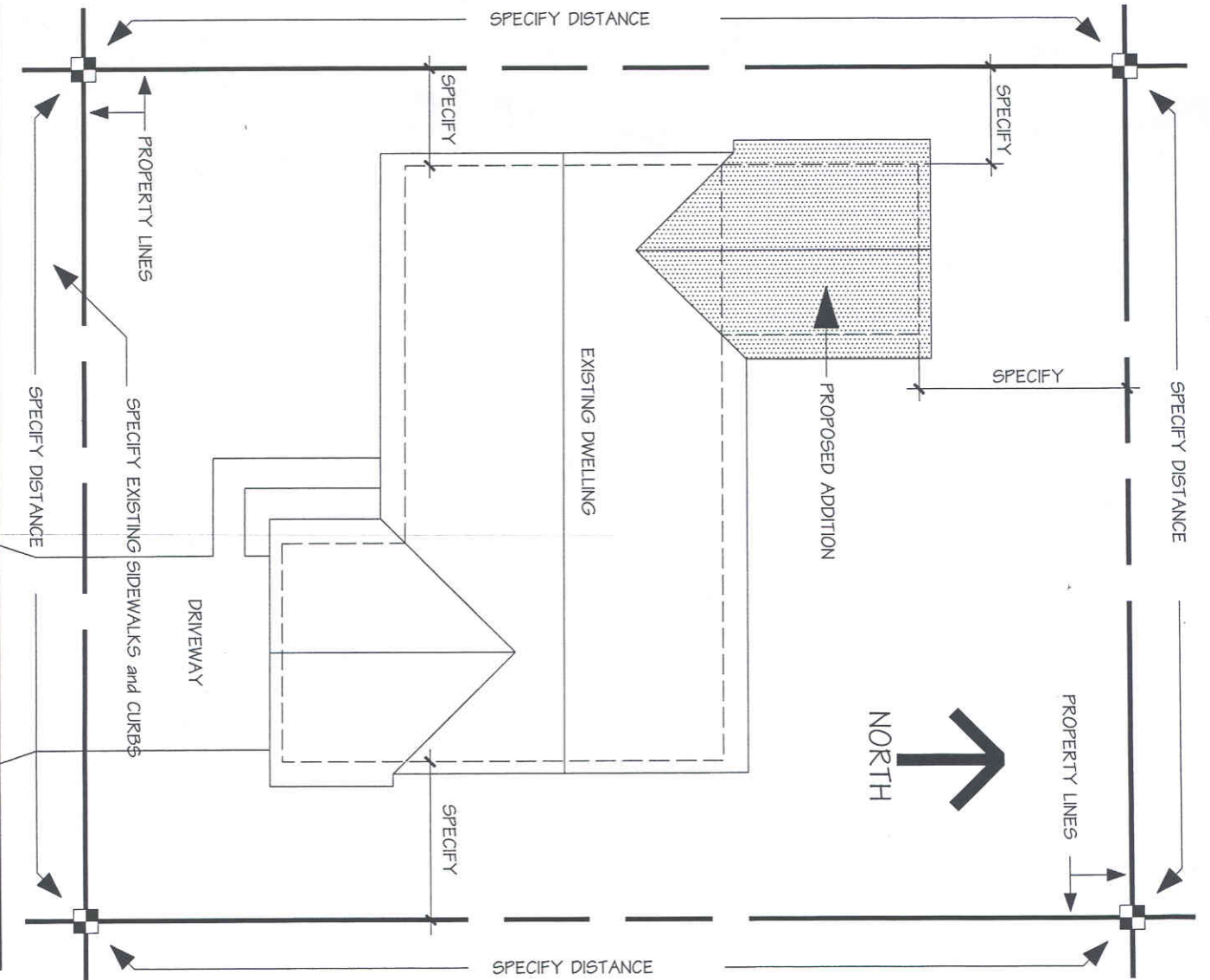
(PRINT CLEARLY)

PROJECT ADDRESS:

(PRINT CLEARLY)

NOTE:

OWNER'S NAME AND PROJECT ADDRESS  
MUST APPEAR ON EACH DRAWING SHEET



STREET NAME

PLOT PLAN

SPECIFY DRAWING SCALE



# SAMPLE DRAWING

NOTE:  
(1) #4 (1/2" DIA.) REBAR IS REQUIRED  
AT TOP AND BOTTOM OF ALL FOOTINGS

PROVIDE UNDERFLOOR ACCESS  
PROVIDE UNDERFLOOR VENTILATION

SPECIFY

RAISED

CONCRETE SLAB

## ANCHOR BOLTS

SPECIFY:

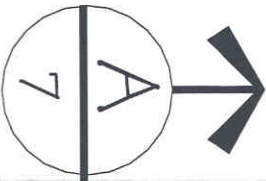
- min. 5/8" dia. x 10" Length
- min. 7" EMBEDMENT
- MAX. SPACING: 6'-0" o/c
- MAX. 1'-0" FROM CORNERS

FLOOR JOISTS

SPECIFY:

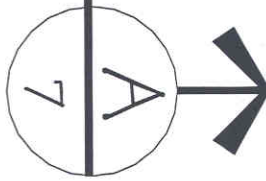
- DIRECTION
- SIZE & SPACING

MIN. 1'-0"



SPECIFY

4" THICK  
CONCRETE  
SLAB



SPECIFY

## ANCHOR BOLTS

SPECIFY:

- min. 5/8" dia. x 10" Length
- min. 7" EMBEDMENT
- MAX. SPACING: 6'-0" o/c
- MAX. 1'-0" FROM CORNERS

## FLOOR SHEATHING

SPECIFY:

- MATERIAL
- THICKNESS
- PANEL SPAN RATING
- NAILING PATTERN

EXISTING  
CONCRETE  
FOUNDATION

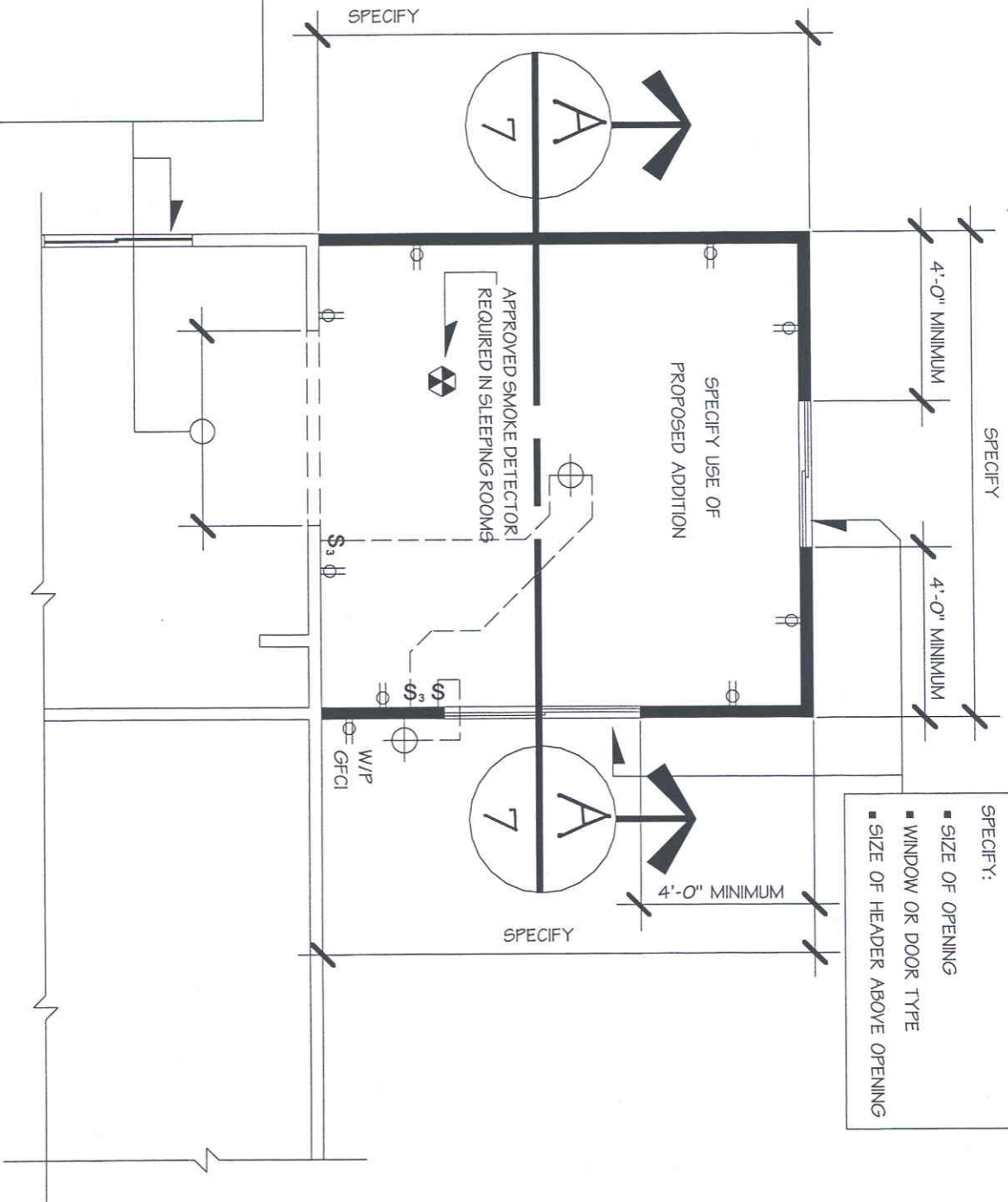
# FOUNDATION PLAN

SPECIFY DRAWING SCALE

EXISTING OPENINGS

SPECIFY:

- SIZE OF EACH WINDOW OR DOOR  
IN EACH ROOM ADJACENT TO  
PROPOSED ADDITION
- SQUARE FOOTAGE & USE  
OF EACH ROOM ADJACENT TO  
PROPOSED ADDITION



**PROPOSED WINDOWS & DOORS**

**SPECIFY:**

- **SIZE OF OPENING**
- **WINDOW OR DOOR TYPE**
- **SIZE OF HEADER ABOVE OPENING**

# FLOOR PLAN

SPECIFY DRAWING SCALE



SPECIFY:

- SPECIFY

ROOF LINE

BUILDING LINE

NEW ROOF AREA

**SPECIFY:**

- ROOFING MATERIAL
- ROOF PITCH
- LENGTH OF OVERHANGS

SPECIFY

RIDGE

**SPECIFY**

SPECIFY

EXISTING ROOF LINE  
EXISTING BUILDING LINE

**PROPOSED ROOF FRAMING**  
**SPECIFY:**

- RAFTER SIZE & SPACING
- RAFTER DIRECTION
- CLING. JOIST SIZE & SPACING
- CLING. JOIST DIRECTION
- SIZE OF RIDGE BOARD

NOTE: TRUSS CALCULATIONS ARE

REQUIRED FOR FACTORY-BUILT

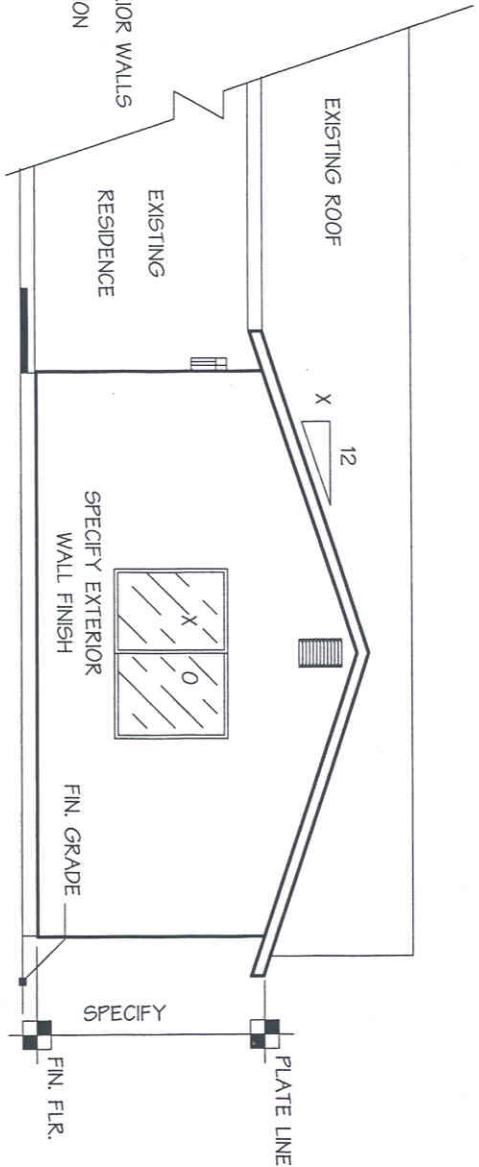
## PREFABRICATED ROOF TRUSSES

# ROOF PLAN

SPECIFY DRAWING SCALE

## SAMPLE DRAWING

- EXTERIOR ELEVATIONS
- SPECIFY:
- REAR, LEFT and RIGHT SIDE VIEWS
  - DOORS and WINDOWS
  - EXTERIOR WALL FINISH MATERIALS
  - ROOFING MATERIAL
  - ROOF PITCH
  - METHOD OF LATERAL BRACING OF EXTERIOR WALLS
  - FINISHED FLOOR to PLATE LINE DIMENSION
  - LINE OF FINISHED GRADE

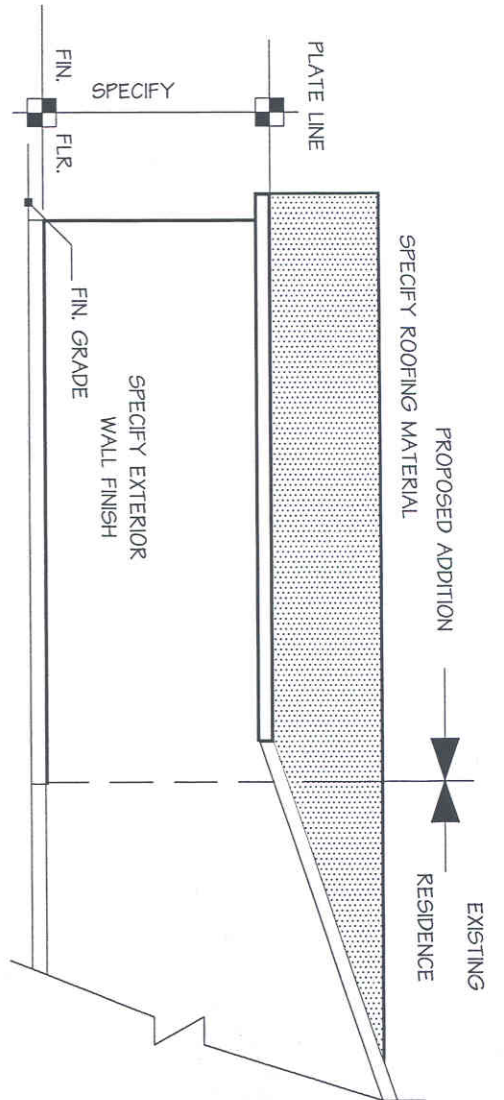


REAR

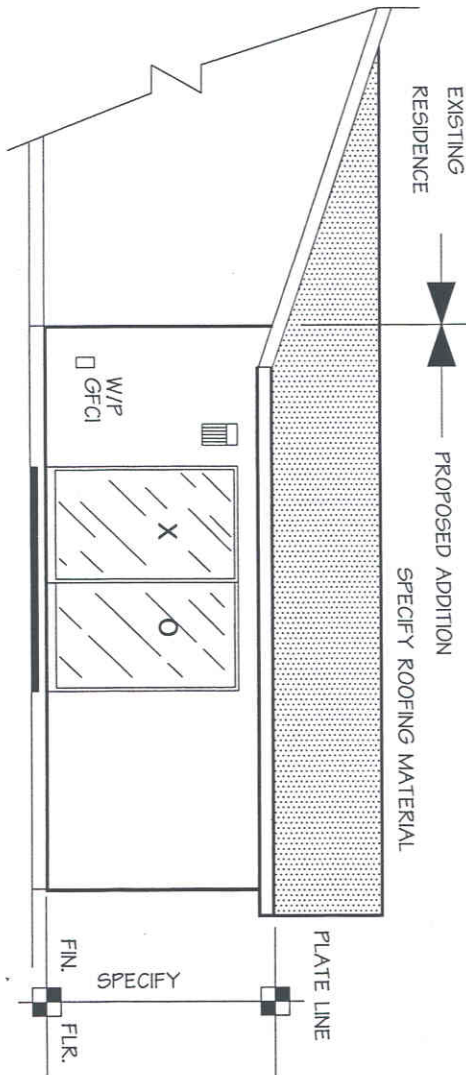
# EXTERIOR ELEVATION

SPECIFY DRAWING SCALE





## RIGHT SIDE



## LEFT SIDE

# EXTERIOR ELEVATIONS

SPECIFY DRAWING SCALE

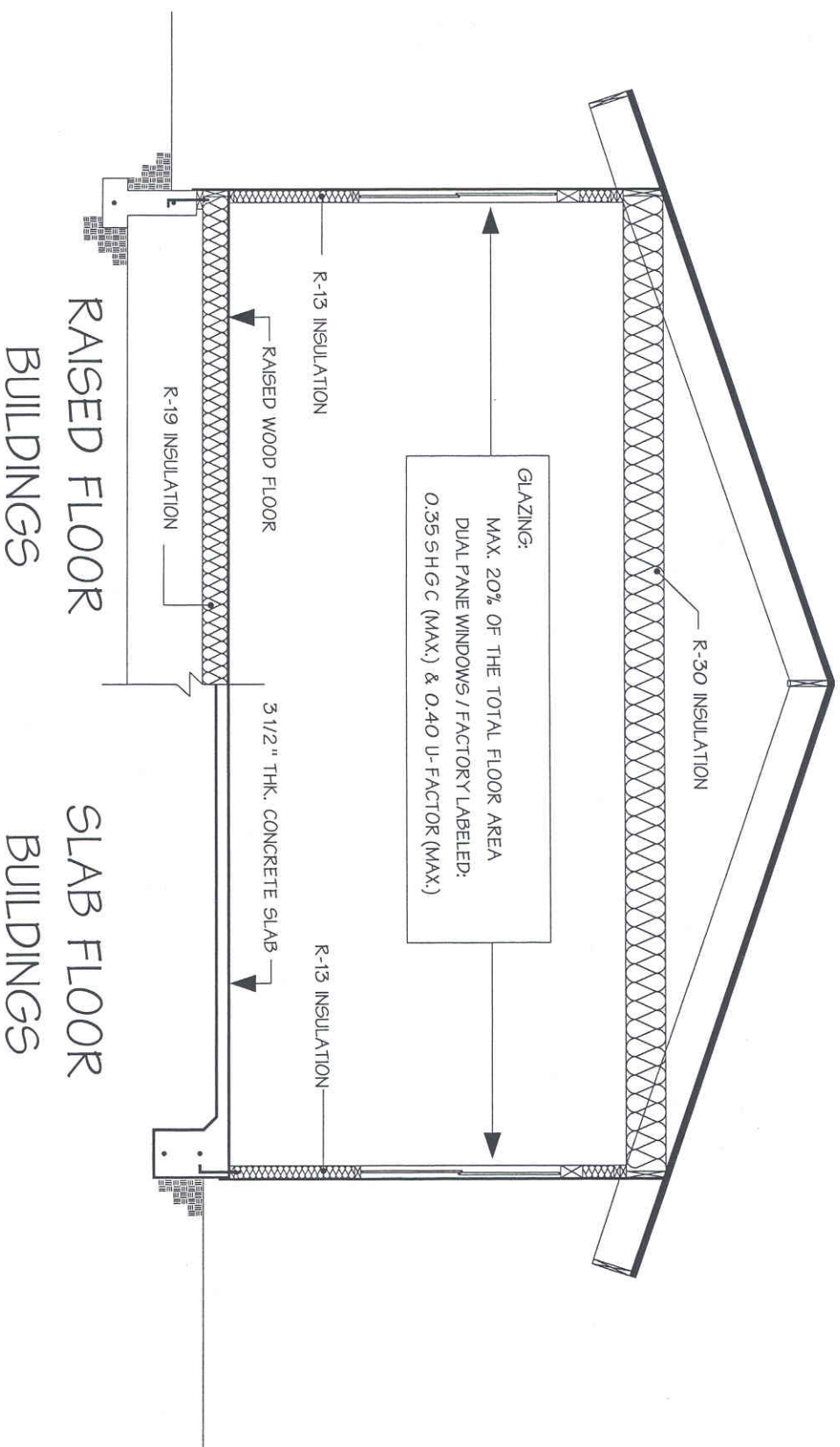
**SAMPLE DRAWING**



SPECIFY DRAWING SCALE



NOTE: MANDATORY FEATURES AND DEVICES SHALL BE INCORPORATED AS PER CALIFORNIA  
ENERGY COMMISSION FORM MF-1R FOR NEW HOMES AND ROOM ADDITIONS.



# MINIMUM RESIDENTIAL ENERGY CONSERVATION REQUIREMENTS